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ABSTRACT

This study compared students' reflections on their highest lifetime educational aspirations at college entry (Time 1--"then") to those held later at the time of college outcomes assessment (Time 2--"now"). Data from archive files of the American College Testing Program's College Outcomes Survey (COS) for one historically black four-year private college for 879 students were compared to data from 99 other four-year institutions (n=48,129). About 4 in 10 students in each sample indicated no change in their highest lifetime educational aspirations since they first entered, although in the single institution sample, this stability of aspiration was greater for female (48%) than for male (35%) students. At least half of each sample increased their level of aspiration by one, two, or three steps. Larger percentages of students at the single institution than in the national sample indicated that they aspired to a doctorate/professional degree when they first enrolled. This pattern of difference was even larger by the time they took the COS. Six in 10 female students and 4 in 10 male students at the single institution indicated they now wanted to earn a doctorate/professional degree, but only a quarter of each gender in the national comparison group expressed this aspiration. (SLD)

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Measuring the College Impact on Students' Lifetime Educational Aspirations

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Measuring the College Impact on Students' Lifetime Educational Aspirations

Abstract

A college can explore its impact on students' lifetime educational aspirations by comparing what students say those aspirations were at entry with what they say they are toward the end of their undergraduate years. This study compared students' reflections on their highest lifetime educational aspirations at college entry (Time 1—'then') to those held later at the time of college outcomes assessment (Time 2—'now'). Data from archive files of the ACT *College Outcomes Survey* (COS) for one historically black 4-year private college (N=879) were compared to data from 99 other 4-year institutions (N=48,129). About four in 10 students in each sample indicated *no change* in their highest lifetime educational aspirations since they first entered, although in the single institution sample, this stability of aspiration was greater for female (48%) than for male (35%) students. At least half of each sample increased their level of aspiration by one, two, or three steps. Larger percentages of students at the single institution than in the national sample indicated they aspired to a doctorate/professional degree when they first enrolled. This pattern of difference was even larger by the time they took the COS. Six in 10 female students and 4 in 10 male students at the single institution indicated they now wanted to earn a doctorate/professional degree, but only a quarter of each gender in the national comparison group expressed this aspiration.

Measuring the Impact of College on Students' Lifetime Educational Aspirations

Most colleges would like to help students raise their lifetime educational goals. One way to observe the extent to which this is happening is to compare students' aspirations when they first entered the college with those held a few years later.

In a recent issue of *Academic Exchange Quarterly*, McLure and Rao (Spring 2001) describe a simple procedure for observing such changes. In essence, students who had attended the college for a sufficiently long time were asked to reflect on and indicate their highest lifetime educational aspiration, first, as it was at the time they first entered the institution and, second, as it was at present. By comparing student aspirations at these two points in time, the authors devised a way to observe the college impact on students. Aspiration levels for students attending 4-year colleges were assessed in terms of steps from associate to bachelor's to master's to doctorate degree.

Using two specific questions and other demographic data from archive files for the ACT *College Outcomes Survey* (COS) for 4-year institutions, McLure and Rao found that more than half of students increased their lifetime aspirations by one or more steps from the time they enrolled to the time of assessment. Two in five indicated no change, and about one in 20 reduced their aspirations by one or more steps. Of those who increased their aspirations, one in three did so by one step, one in six by two steps, and fewer than one in 20 by three steps. The question implied in the earlier study and presented in the present one is whether or not the size of student percentages at each aspiration level and the extent of their aspiration change from Time 1 ('then') to Time 2 ('now') can be formulated as indicators or gross measures of institutional impact.

To further explore this possibility, we decided to compare such data from one 4-year institution to that of a larger national 4-year college comparison group. Based on findings of the earlier study, we expected students at the single institution to follow aspiration patterns established in the earlier study, yet we were looking for any deviations.

Purpose of Study

The purpose of the current study was to replicate the McLure and Rao (2001) study and extend it to include a comparison of a single 4-year institution with a group of 99 other 4-year colleges. Research questions included the following.

- At the single college, what percentage of students expressed aspirations at each of the four levels of interest: associate degree, bachelor's degree, master's degree, and doctorate/professional level?
- How did these percentages compare with those for the national comparison group?
- At the single institution, what proportions of students increased their level of highest lifetime aspiration from Time 1 to Time 2; what proportion decreased; and what proportion stayed the same?
- How did these percentages differ from those of the national comparison group?
- At the single institution, how did males and females differ at enrollment (Time 1) with respect to their levels of lifetime aspiration? How did the levels of aspiration of these gender groups differ at Time 2?
- How did male and female patterns of aspiration at the single institution compare with those of the national comparison group?

Method

Sample

The initial sample of 60,213 students was reduced to 49,008 by dropping those who did not provide useable responses to both questions of interest—the questions about students' highest lifetime aspirations (COS, Section I, Item L). Students in the study attended 100 different 4-year colleges, one of which served as the single institution to which we compared the other 99 as a group.

The single institution, Tuskegee University, had a total of 879 students—334 males and 543 females—who answered both criteria items. The national user group sample had 48,129 students—19,721 males and 29,186 females—who answered both items.

Instrument

In addition to other useful demographic data, the ACT *College Outcomes Survey* (COS) lists the two questions in Section I, Item L, of the Background Information (demographics) section. For responses to these questions, students are instructed to mark the "highest goal you **now** intend to pursue **in your lifetime**" and the "highest goal you had **when you first enrolled here**." They respond to each of these questions by selecting one of eight levels of education listed for that item. These eight levels are (1) *some high school or less*; (2) *high school diploma or GED certificate*; (3) *some college, no degree/certificate*; (4) *vocational/technical degree/certificate*; (5) *associate degree*; (6) *bachelor's degree*; (7) *master's degree (MS, MA, MBA)*; and (8) *doctorate/professional degree (PhD, MD, EdD, JD)*. Data collected from colleges using this survey instrument are archived and were used in this study.

Procedures

First, we analyzed percentages of students who indicated the highest level of their aspiration at the time they first enrolled at the college and again at the time of completing the COS. Next, we calculated the percentage of each group who maintained their initial level of aspiration, the percentage who aspired to a higher level, and the percentage who aspired to a lower level than at that of their entry level. We also analyzed differences in male and female responses to the two questions for the single institution and for the national comparison group.

Results

The results from this study are presented in six tables and six figures. Half or more of each sample indicated their aspirations had increased since first enrolling at the institution. However, about four in 10 students in each sample indicated *no change* in their highest lifetime educational aspirations since they first entered. Females attending the single institution entered with higher aspirations than their male counterparts, perhaps accounting for some of the stability in their level of aspiration: 48% of female students compared to 35% of male students indicated no change in aspiration level since first enrolling.

At least half of each sample increased their level of aspiration by one, two, or three steps. Larger percentages of students at the single institution than in the national sample indicated they aspired to a doctorate/professional degree when they first enrolled. This pattern of difference was even larger by the

time they took the COS. Six in 10 female and 4 in 10 male students at the single institution indicated they now wanted to earn a doctorate/professional degree. In the national comparison group, only a quarter of each gender expressed this aspiration.

At the single institution, students aspiring to a doctorate/professional degree since they first enrolled increased by nearly 21 percentage points compared to an 11 percentage-point gain for the national comparison group. At the single institution, nearly 44% of male students and 57% of female students indicated highest lifetime aspirations at the doctorate/professional degree level. In the national COS user group, about 25% male students and 24% of female students indicated highest lifetime aspirations at the doctorate/professional degree level.

Highlights from Table 1 and Figures 1 and 2

- Of the 879 students in the Tuskegee University sample, 42% indicated they now aspired to a master's degree compared to 22% at the time they first enrolled at the institution ('then'), and 52% now aspired to a doctorate or professional degree, compared to 31% then.
- In the national comparison group, 24% now aspired to a doctorate, compared to 13% for that group when they first enrolled.
- The greatest change for the national user group was a 30 percentage-point increase in students aspiring to a master's degree.

Table 1 Highest Lifetime Aspirations of Tuskegee University Then and Now Compared to National COS User Group Sample

Four Levels of Lifetime Educational Goals	Tuskegee University N=879			National COS User Group N=48,129		
	% Then	% Now	Difference	% Then	% Now	Difference
1. Associate degree or below	23.7	0.5	-23.2	20.1	1.6	-18.5
2. Bachelor's degree	22.9	5.6	-17.3	43.4	20.6	-22.8
3. Master's degree (MS, MA, MBA)	22.3	42.0	19.7	23.4	53.7	30.3
4. Doctorate professional degree (PhD, MD, EdD, JD)	31.2	52.0	20.8	13.1	24.1	11.0

Highlights from Table 2

- About 43% of each group's students indicated no change in the lifetime educational goal they had when they first enrolled in the college.
- More than half of each group's sample indicated an increase in aspiration by one, two, or three steps since entering the institution.

- For Tuskegee University, 13% indicated a gain of three steps compared to 4% of the national comparison group who indicated a 3-step gain.

- Fewer than 7% of the Tuskegee sample indicated a decrease in their lifetime goal, and the large majority of those were decreases of only one step.

- About 5% of the national COS user group reported a decrease and again, most of those were of only one step.

Table 2 Then to Now Changes in Highest Lifetime Aspirations: Tuskegee University Compared to National COS User Group

Steps in Aspiration Change	Tuskegee University N=879		National COS User Group N=48,129	
	Frequency	% by Number of Steps	Frequency	% by Number of Steps
Loss: 3 Steps	1	0.1	21	0.0
Loss: 2 Steps	4	0.5	228	0.5
Loss: 1 Step	53	6.0	2,056	4.5
Same: 0 No change	380	43.2	20,549	42.7
Gain: 1 Step	189	21.5	15,903	33.0
Gain: 2 Steps	138	15.7	7,462	15.5
Gain: 3 Steps	114	13.0	1,910	4.0

Highlights from Table 3 and Figures 3 and 4

- Of the 334 male students in the Tuskegee University sample, about 48% indicated they now aspired to a master's degree, compared to 23% who indicated they had aspired to a doctorate/professional degree when they first enrolled. Close to 44% now aspired to a doctorate degree, compared to about 23% then.

- In the national comparison group, 25% of the 19,721 male students indicated they now aspired to a doctorate/professional degree, compared to more than 13% who reported having this lifetime aspiration when they first enrolled.

Table 3 Male Students' Highest Lifetime Aspirations Then and Now: Tuskegee University Compared to National COS User Group

Four Levels of Lifetime Educational Goals	Males - Tuskegee University (N=334)			Males - National User Group (N=19,721)		
	% Then	% Now	Difference	% Then	% Now	Difference
1. Associate degree or below	22.8	0.6	-22.2	19.2	1.4	-17.8
2. Bachelor's degree	30.8	7.5	-23.3	44.9	22.1	-22.8
3. Master's degree (MS, MA, MBA)	23.1	48.2	25.1	22.5	51.4	28.9
4. Doctorate professional degree (PhD, MD, EdD, JD)	23.4	43.7	20.3	13.4	25.1	11.7

Highlights from Table 4 and Figures 5 & 6

- Of the 543 female students in the Tuskegee University sample, about 38% indicated they now aspired to a master's degree but only 22% indicated they had aspired to a master's degree when they first enrolled. About 57% now aspired to a doctorate/professional degree compared to about 36% then.

- In the national comparison group, 24% of the 29,186 female students now aspired to a doctorate or professional degree, compared to about 14% who indicated they had this goal when they entered the college.

- Although a much higher percentage of Tuskegee University female than of male students indicated a lifetime goal of a doctorate/professional degree, only one in eight male students and one in 20 female students wanted to settle for a bachelor's degree as their highest.

Table 4 Female Students' Highest Lifetime Aspirations Then and Now: Tuskegee University Compared to National COS User Group

	Females - Tuskegee University (N=543)			Females - National User Group (N=29,186)		
Four Levels of Lifetime Educational Goals	% Then	% Now	Difference	% Then	% Now	Difference
1. Associate degree or below	24.3	0.4	-23.9	20.8	1.9	-18.9
2. Bachelor's degree	18.0	4.4	-13.6	41.8	19.2	-22.6
3. Master's degree (MS, MA, MBA)	21.7	38.3	16.6	23.9	54.9	31.0
4. Doctorate/professional degree (PhD, MD, EdD, JD)	35.9	56.9	21.0	13.5	24.2	10.7

Highlights from Table 5

- In the Tuskegee University sample, 35% of male students and about 48% of female students indicated at the time they took the COS that they had had no change in their lifetime aspiration level since entering the college.

- A larger percentage of male students (56%) than of female students (47%) increased their aspiration by one, two, or three steps.

- A larger percentage of male students (9%) than of female students (5%) decreased their aspiration by one or more steps.

Table 5 Then to Now Changes in Highest Lifetime Aspirations of Tuskegee University Sample: Male Students Compared to Female Students

Steps in Aspiration Change	Male Students N=334		Female Students N=543	
	Frequency	% by Number of Steps	Frequency	% by Number of Steps
Loss: 3 Steps	0	0.0	1	0.2
Loss: 2 Steps	2	0.6	2	0.4
Loss: 1 Step	28	8.4	25	4.6
Same: 0 No change	117	35.0	262	48.3
Gain: 1 Step	87	26.0	101	18.6
Gain: 2 Steps	61	18.3	77	14.2
Gain: 3 Steps	39	11.7	75	13.8

Highlights from Table 6

- In the national COS user group sample, a slightly larger percentage of male students (nearly 44%) than of female students (42%) indicated they had remained constant in their level of lifetime aspiration from the time they first enrolled to the present ("now").
- About the same percentages of male and female students in the national COS user group indicated an increase in lifetime goal of one, two, or three steps.

Table 6 Then to Now Changes in Lifetime Aspirations of National COS User Group Sample: Male Students Compared to Female Students

Steps in Aspiration Change	Male Students N=19,721		Female Students N=29,186	
	Frequency	% by Number of Steps	Frequency	% by Number of Steps
Loss: 3 Steps	15	0.1	7	0.0
Loss: 2 Steps	101	0.5	130	0.4
Loss: 1 Step	815	4.1	1292	4.4
Same: 0 No change	8621	43.7	12258	42.0
Gain: 1 Step	6297	31.9	9763	33.5
Gain: 2 Steps	3028	15.4	4561	15.6
Gain: 3 Steps	844	4.3	1175	4.0

Discussion

We used two approaches to analyze students' indications of their highest lifetime educational aspirations as they recalled them at the time they first entered the college (Time 1—'then') and as they now felt about their aspirations after spending considerable time at the institution (Time 2—'now'). Data from students at a historically black private 4-year institution were compared to students in a national COS user group sample of 4-year institutions. We based our two approaches primarily on percentages of students that indicated what their highest aspirations were then and now.

In the first approach, we presented tables containing percentages of each group of students who indicated their highest of four lifetime educational aspirations at each of the two points in time. In the second approach, we provided tables for each comparison group containing percentages of students in relation to the number of steps forward or backward they took at each of the two points in time--then and now.

The single institution selected for this study, Tuskegee University, is a historically black university, not necessarily typical of other HBCUs or of other colleges in the study. To some extent, Tuskegee University's students may have responded with high aspirations toward the PhD because of recent discussions on that campus about the possibility of adding a PhD program to the university. The higher level of aspiration among female students on a historically black campus than of female students on a non-HBCU campus is not surprising, but we need more specific analysis to provide a fuller interpretation of their responses. For example, additional analysis of the aspirations of female students—whether black or white or other--at HBCUs and of black females at non-HBCUs could offer additional clues to explain the pattern of female responses we found for Tuskegee University. However, that analysis was beyond the limited scope of this study.

We did not analyze the racial/ethnic background of students in either sample. Many HBCUs now have several other racial/ethnic groups represented on their campuses. Nevertheless, we can safely assume that a large portion of both the male and female components of the Tuskegee University sample is black. Having said that, we could ask, for example, whether it is possible that Tuskegee University is attracting black female students with higher aspirations. We could also ask whether the support systems on the HBCU campus contributed to the higher-than-average occurrence of doctorate/professional degree aspiration among both male and female students at Tuskegee University.

HBCUs have played an important role in the higher education community, especially for black students. Most are 4-year accredited institutions that are widely acknowledged for their significant contributions to providing equal educational opportunity for black, low income, and educationally disadvantaged Americans. In 1994, HBCUs awarded 28% of all bachelor's degrees earned by black students nationwide, 14.5% of all master's degrees, 9.3% of all doctor's degrees, and 15.5% of all first-professional degrees. For more than 150 years, HBCUs have provided black students access to higher education. (See U. S. Department of Education, NCES, 1996, pp. 3-4.)

When students lift their aspirations after being on campus for a few years, that institution may at least hope it is doing something right. The findings of this study offer evidence, not proof. Additional analysis of the data might offer additional clues to explain the findings, but in the final analysis, we are depending on students' self reported data, half of which was gathered as a reflection on their aspirations at the time they first entered the institution. Nevertheless, survey data can provide much insight into students' experience on campus. Self reported data has been found to be fairly reliable over the years. (See Astin, 1991; Sawyer, Laing, & Houston, 1988; Valiga, 1990, 1987.)

For those students who do not lift their sights or aspire to a level of education at least as high as they had at the time of first enrolling, an institution may want find out more about who they are. With more insight into the plight of these students, institutions may be able to provide better support services. Or indeed, perhaps they have helped in guiding the student to a more realistic outcome. Perhaps some students entered with unrealistic sights and found that more modest goals are more appropriate.

An institution can continue to analyze its feedback from students and may in the process decide that institutional changes are needed to assist students whose aspirations did not soar. Assessment adds new insights but also new questions to ponder.

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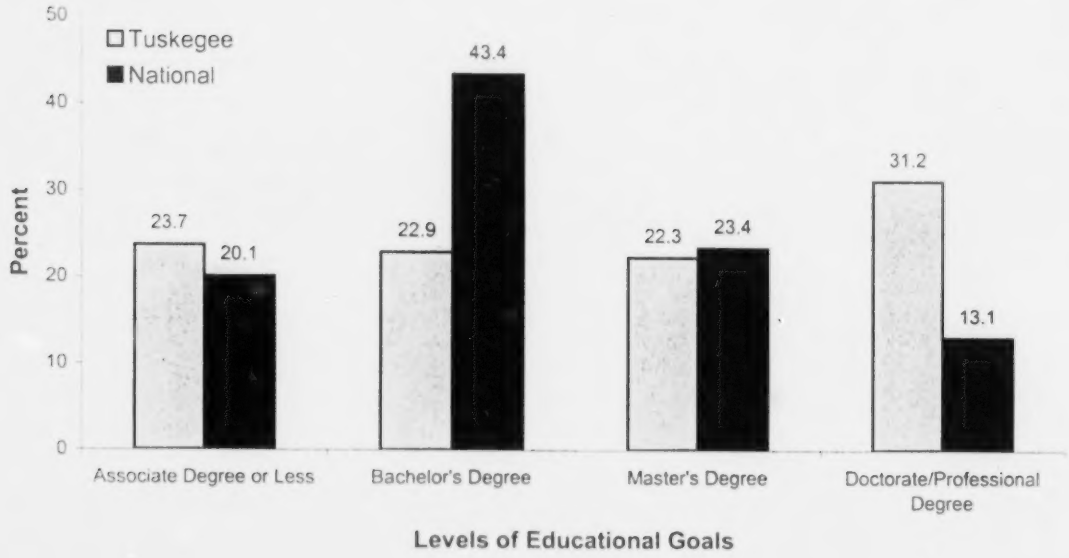
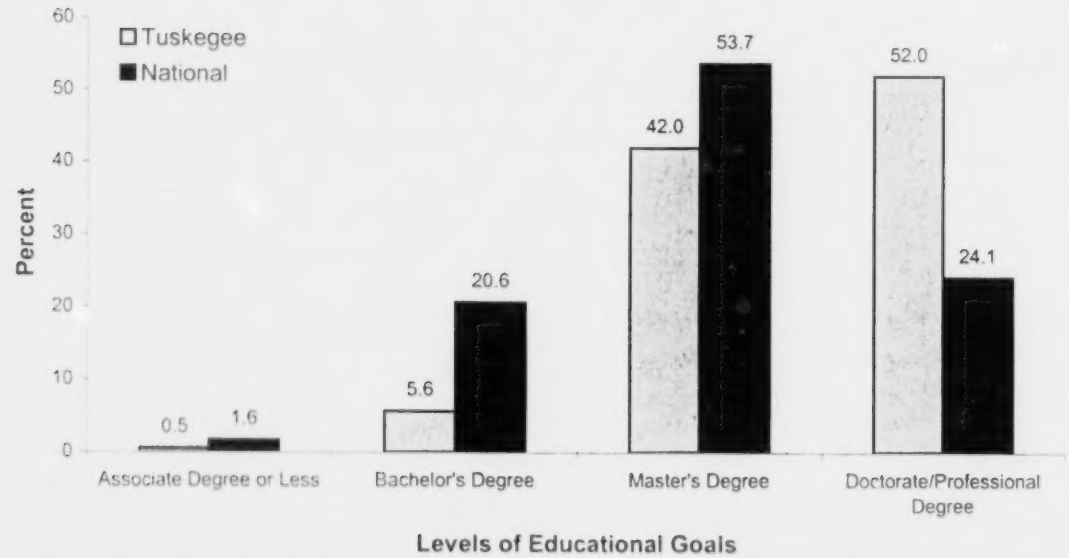
Figure 1 Highest Lifetime Goal Upon Entry:
Tuskegee University Compared to National COS User Group



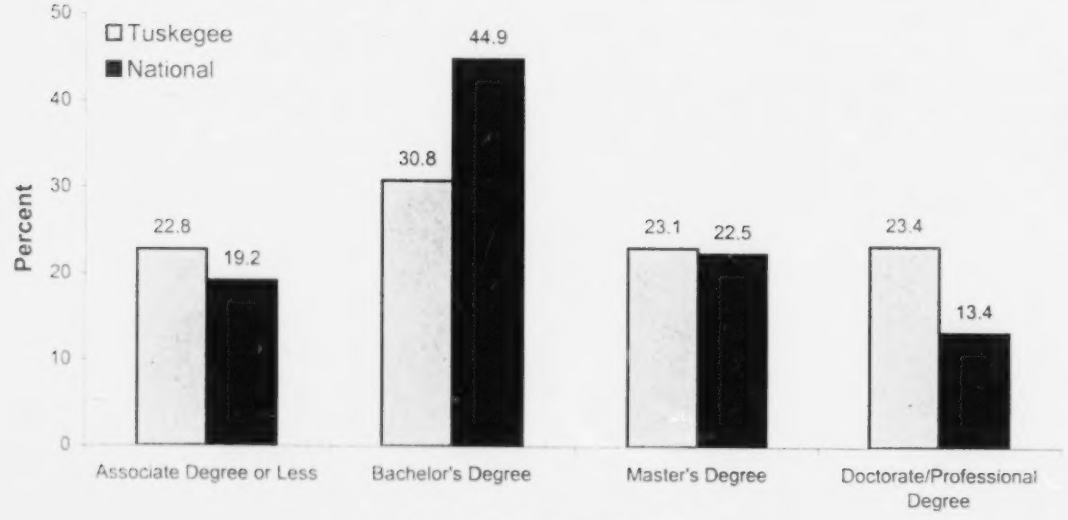
Note: Data for this figure are found in Table 1.

Figure 2 Highest Lifetime Goal Now:
Tuskegee University Compared to National COS User Group



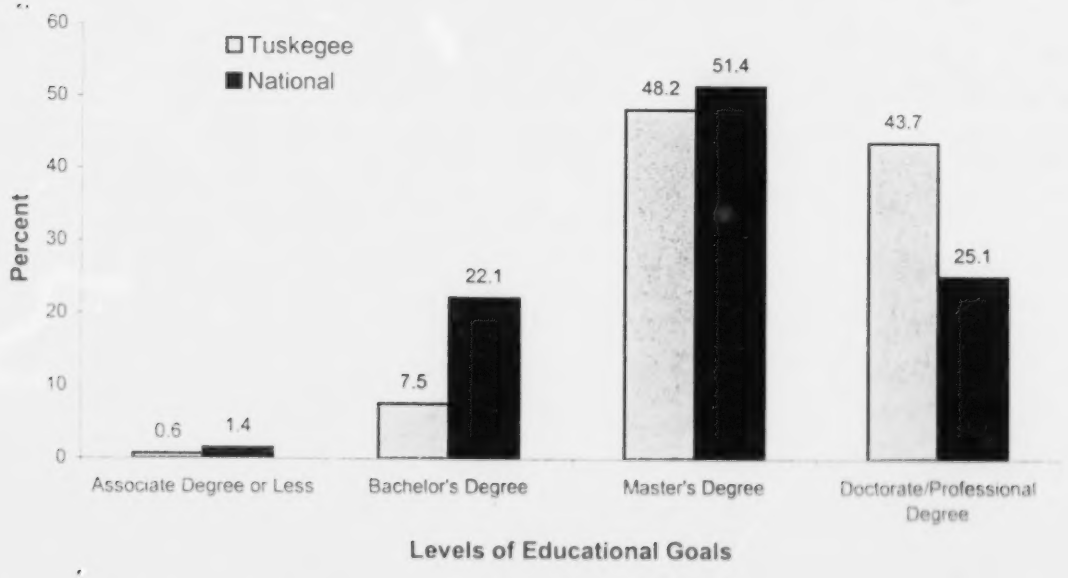
Note: Data for this figure are found in Table 1.

Figure 3 Male Students' Highest Lifetime Goal Upon Entry: Tuskegee University Compared to National COS User Group



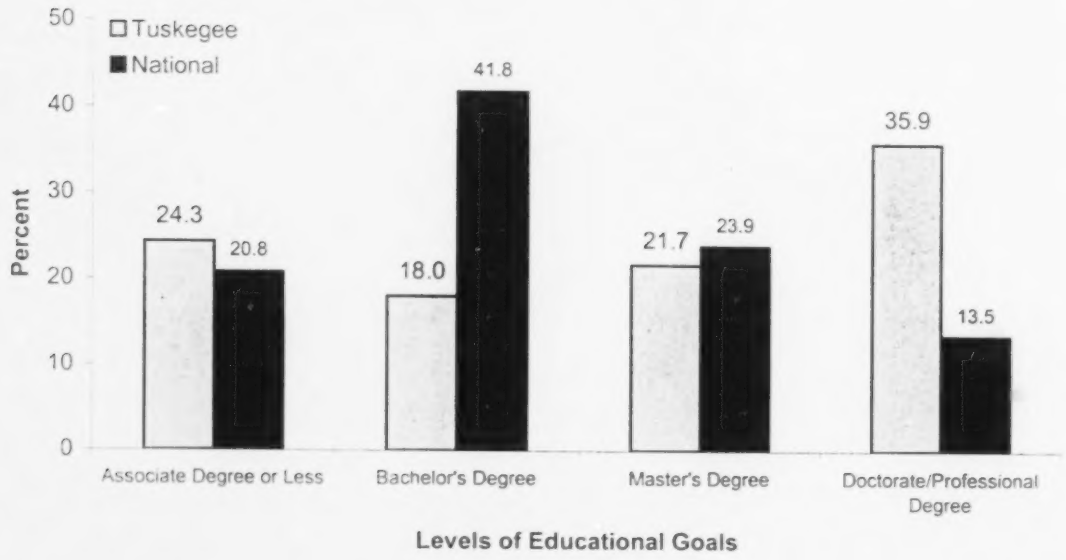
Note. Data for this figure are found in Table 3.

Figure 4 Male Students' Highest Lifetime Goal Now: Tuskegee University Compared to National COS User Group



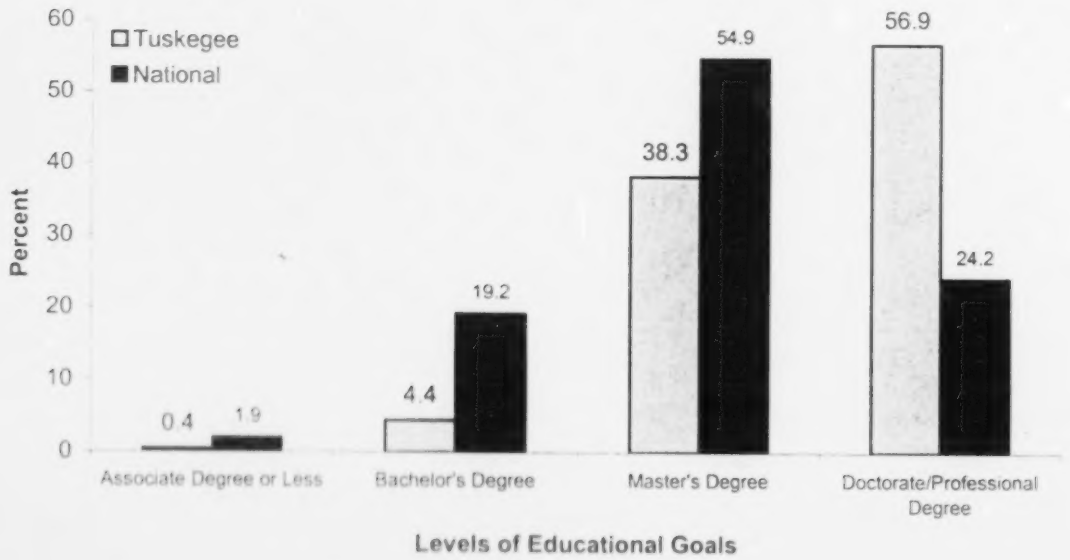
Note. Data for this figure are found in Table 3.

Figure 5 Female Students' Highest Lifetime Goal Upon Entry: Tuskegee University Compared to National COS User Group



Note. Data for this figure are found in Table 4.

Figure 6 Female Students' Highest Lifetime Goal Now: Tuskegee University Compared to National COS User Group



Note. Data for this figure are found in Table 4.